

HERPETOLOGISTS AND SNAKE-BITE:— Snake-bite is an occupational hazard for professional and amateur herpetologists alike. A series of clinical case studies of reptile keepers bitten by snakes has revealed several 'at risk' themes. This note documents these in the hope that the frequency and morbidity of bites might be reduced, and convalescence hastened.

Snake-bite involving experts can happen at any time, including while attempting to catch snakes. The majority of clinical cases, however, occur during cleaning of vivaria or during other husbandry activities. Many cases occur at night. Unlike other syndromes of human snake-bite (the 'Big Game Hunter' scenario, for example, where an amateur, often intoxicated, tries to catch a snake for an audience), the victim is often working alone. The victim, despite experience in handling reptiles, sometimes is unsure whether a strike has actually occurred. A snake can strike a hand in a cage and recoil with lightning speed. As well, the skin lesions caused by the majority of Australian elapid snakes are trivial. Often no lesions or blood specks are visible in the first few minutes after strikes.

Many reptile fanciers who are bitten are envenomed by dangerous Australian species. A significant proportion of the very severe clinical envenomations seen in practice results from the bites of *Oxyuranus*, *Pseudonaja* and *Tropidechis*. A special potential medical problem that involves herpetologists is the scenario of envenomation by exotic snakes. It is essential that specific antivenom to African, Asian and American species is held at the national reference antivenom facility (Commonwealth Serum Laboratories, Parkville, Melbourne) if one is keeping such imported species.

Another medical problem for herpetologists is the multiple

(serial) bite syndrome. Snake venom is highly allergenic and many reptile fanciers become sensitised to the venom. Insofar as the initial (transient) collapse of some victims is thought to be due to hypotension, this problem may be of particular relevance to the serial victim. Secondly, the risk of anaphylaxis rises with repeated (serial) injections of horse serum (antivenom) and the risk of such reactions probably rises above ten percent in those who have had several lifesaving infusions following previous bites. One problem encountered in practice is the fear of such reactions in an experienced herpetologist - sweating, tachycardia and faintness can be signs of true envenomation or incipient allergic reactions, or can be those simply of apprehension itself.

The skin lesions of elapid snakes are pleomorphic - typical two fang punctures (often with oozing blood specks) occur in 60 percent of cases only. Single punctures, multiple fang marks, and combined fang and teeth (both maxillary and palatine) lesions are common. If multiple strikes have occurred - a not uncommon scenario for both herpetologists and toddler children (both tend to hang on to the snake) - the potential for severe envenomation is greatly increased.

It is essential that all herpetologists should be trained in first aid, and have a compressive bandage (preferably an Esmarch bandage) and splint handy when they are working. With proper first aid treatment, elapid snakebite does not necessarily mean severe envenomation and severe envenomation does not mean morbidity or death.

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